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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,813	06/09/2001	Francis F. Coghan IV	1043.001US1	5045

23441 7590 02/07/2006

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EXAMINER	
NGUYEN, KIMNHUNG T	
ART UNIT	**PAPER NUMBER**
2677	

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/681,813	COGHAN, FRANCIS F.	
	Examiner	Art Unit	
	Kimnhung Nguyen	2677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendment filed on 11/9/06*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Application has been examined. The claims 1, 3-20 are pending. The examination results are as following.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uminaga (JP patent 01-136225) in view of Hayashi (JP 08-054980).

Regarding claim 18, Uminaga discloses in fig. 1, a pointing device comprising a finger glove (see glove shape, see abstract); means for detecting (see detector 2, see abstract) actuation by the user disposed within the finger glove; and means for detecting relative movement of the finger glove against an external surface external to the pointing device (see abstract, see a moving detecting allowing switch 3 is pushed by a thumb, the hand is moved in front and rear direction and left and right sides).

However, Uminaga does not disclose a finger of a user and ending in a grip, a shape of the finger glove and the grip promoting normal usage of a tip of the finger of the user while the finger is inserted into the finger.

Hayashi discloses in fig. 2, a finger of a user and ending in a grip, a shape of the finger glove and the grip promoting normal usage of a tip of the finger of the user while the finger is inserted into the finger glove touch-typing (see middle finger insert into the part 21 and part 21 made of elastic (see abstract, see 0016-0017).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of ending in a grip, a shape of the finger glove and the grip promoting normal usage of a tip of the finger of the user while the finger is inserted into the finger as taught by Hayashi into the system of Uminaga having finger glove touch-type because this would allow a forefinger and third finger can be arranged on the opening (see 0017) and provide an input signal is send to the computer.

Regarding claim 20, Uminaga discloses further a means for registering the actuation by user and the relative movement detected with a computer (see abstract, see lines 8-13).

3. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uminaga (JP 01-136225) and Hayashi (JP 08-054980) in view of Vance et al. (US 2001/0040550).

Uminaga and Hayashi disclose the pointing device comprising a finger glove (see glove shape, see abstract); means for detecting (see detector 2, see abstract) actuation by the user disposed within the finger glove (see abstract).

However, Uminaga and Hayashi do not disclose a second finger glove.

Vance et al. discloses a second finger glove (114-120, fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of a second finger glove as taught by Vance et al. into the system of Uminaga because this would

provide the different sensors are being activated dependent on the orientation of the finger tip relative to the surface (see abstract).

4. Claims 1, 3-4, 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (JP 08-054980) in view of Vance et al. (US 2001/0040550).

Regarding claim 1, Hayashi discloses in figures 1-2, a pointing device comprising a housing substantially shaped to fit a finger (2) of a user and ending in a grip, shape of the housing and the grip promoting normal usage of a tip of the finger of the user while the finger is inserted into the housing, including touch-typing (see middle finger insert into the part 21 and part 21 made of elastic (see abstract, see 0016-0017); and an optical sensor disposed within a surface of the housing, the optical sensor detecting relative movement of the surface of the housing along two axes therefore against a second external surface caused by relative movement of the finger of the user to cause a pointer on a screen of a computer to correspondingly move(see optical mouse (3) having optical sensor to detect the X and Y directions (see optical fiber from connection cable 3, and connected to finger 2 made of elastic material, abstract, see 0017).

However, Hayashi does not disclose a click sensor disposed within an underside of the housing, the click sensor actuated by the user pressing the underside of the housing through the finger against the first external surface with sufficient force.

Vance et al. discloses in figs 1-3, a click sensor actuated by the user pressing the underside of the housing through the finger against the first external surface with sufficient force (see a magnetic reed switch mounted on index finger, see 0019).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of a click sensor through finger as taught by Vance et al. into the pointing device comprising a housing substantially shaped to fit finger of Hayashi because this would generate a specific signal corresponding to a stimulus sensed at a specific one of the locations (see 0019).

Regarding claims 3, 6-7, Hayashi discloses in figures 1, a pointing device comprising a housing substantially shaped to fit a finger of a user as discussed in claim 1. Hayashi also discloses the pointing device; further comprising the grip used of tip of finger and the housing is from a flexible, glove-like material (see figures 1-2, see fingers 2, 4, 5 made of elastic material, see 0017).

Regarding claim 4, Hayashi discloses the finger of the user as to which the housing is specifically receptive is an index finger (see forefinger 5, figure 1-2, see 0017).

Regarding claim 8, Hayashi discloses the second finger of the user is a middle finger of the user (see 0017).

6. Claims 5, 9-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (08-054980) and Vance et al. (US 2001/0040550) as applied to claim 1 above, and further in view of Zloof (US 5,489,922).

Regarding claim 5, Hayashi and Vance et al. do not disclose a second housing. Zloof discloses a second housing (24, see figures 1-2) and a second click sensor (46) disposed within an underside of the second housing, the click sensor actuated by user pressing the underside of the second housing through the second finger against the first external surface with the sufficient

force (see figure 7, column 5, lines 3-14, because the first and second housing are the same features).

Regarding claims 10 and 17, Hayashi and Vanve et al. do not disclose a wireless transceiver for wireless communication with a corresponding wireless transceiver of a computing device.

Zloof discloses a wireless transceiver for wireless communication (12) with a corresponding wireless transceiver of a computing device (14)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the wireless transceiver for wireless communication with a corresponding wireless transceiver of a computing device as taught by Zloof into the system of Hayashi because this would transmit the signal from the housing to the computing without the cord and thus less cost for the user.

Regarding claim 11, Hayashi and Vance et al. do not disclose a second housing attachable to a wrist of the user and in which the wireless transceiver is disposed; and a cable connecting the second housing. Zloof discloses in figure 1-2, a second housing attachable to a wrist (64) of the user and in which the wireless transceiver is disposed; and a cable connecting the second housing (see column 5, lines 63-67).

Regarding claim 13, Hayashi and Vance et al. do not disclose the first external surface and the second external surface are the same surface. Zloof discloses the first external surface and the second external surface are the same surface.

Regarding claim 14, Hayashi and Vance et al. discloses in figures 1-2, a first housing, substantially shaped to fit a finger of a user and ending in a grip, shape of the housing and the grip promoting normal usage of a tip of the finger of the user while the finger is inserted into the housing, including touch-typing (see middle finger insert into the part 21 and part 21 made of elastic (see abstract, see 0016-0017); an optical mouse (3) having optical sensor to detect the X and Y directions (see optical fiber from connection cable 3, and connected to finger 2 made of elastic material as discussed above.

However, Hayashi does not disclose a second click sensor disposed within an underside of the housing, the click sensor actuated by the user pressing the underside of the housing through the finger against the first external surface with sufficient force.

Vance et al. discloses in figs 1-3, a click sensor actuated by the user pressing the underside of the housing through the finger against the first external surface with sufficient force (see a magnetic reed switch mounted on index finger, see 0019).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of a click sensor through finger as taught by Vance et al. into the pointing device comprising a housing substantially shaped to fit finger of Hayashi because this would generate a specific signal corresponding to a stimulus sensed at a specific one of the locations (see 0019).

Hayashi and Vance et al. do not disclose a second housing.

Zloof discloses a second housing in fig. 1 as discussed above.

Regarding claim 15, Hayashi and Vance et al do not disclose grip situated at an end of each of the first and second housing.

Zloof discloses a grip situated at an end of each of the first and second housing (22, 24 because a grip should stick to the housing).

Regarding claims 9 and 16, Hayashi discloses in figure 1, a cable (3) ending in a connector for connection to a computing device, such that the actuation of the click sensor and relative movement detected by the optical sensor (see are registered with the computing device through the cable (see optical fiber from connection cable 3, and connected to finger 2 made of elastic material, abstract, see 0017).

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (JP 08-054980) in view of Vance et al. (US 2001/0040550) and Zloof (US patent 5,489,922) as applied to claims 1-11 above, and further in view of Iwasaki (Patent application Publication 2002/0024502).

Hayashi, Vance et al. and Zloof disclose a first and second housing shaped to fit a finger of user as discussed above. However, they do not disclose an expansion slot disposed within the second housing and receptive to a corresponding expansion card, data stored on which is accessible to the computing device through the wireless communication.

Iwasaki disclose in figure 6, a mouse (40) having a slot (22a), and the storage medium 21 (expansion card) inserted or taken out of the housing.

It would have been obvious to one or ordinary skill in the art at the time the invention was made to implement a slot and the storage medium can be inserted into the housing of the mouse as taught Iwasaki into the system of Hayashi, Vance et al. and Zloof having second

housing because this would record new data by the interchanging the card memory of the mouse system. (see fig. 6).

Response To Arguments

8. Applicant's arguments filed on 11/9/05 have been fully considered but they are not persuasive.

Applicant' states in the claims 1, 14, and 18 has been amended, Hayashi and Vance do not disclose the housing substantially shaped to fit a finger of a user "end in a grip", where "a shape of the housing and grip promote normal usage of a tip of the finger of the user while the finger is inserted into the housing, including touch-typing."

Examiner respectfully disagreed because Hayashi discloses in fig. 2, a finger of a user and ending in a grip (see middle finger insert into the part 21), a shape of the finger glove and the grip promoting normal usage of a tip of the finger of the user while the finger is inserted into the finger glove touch-typing (see middle finger insert into the part 21 and part 21 made of elastic (see abstract, see 0016-0017). For these reasons the rejections are maintained.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen
January 30, 2006

AMR A. AWAD
PRIMARY EXAMINER